DOCUMENT RESUME

ED 346 583 EA 024 01[illegible]

AUTHOR Ikpa, Vivian W.
TITLE The Norfolk Decision: The Effects of Converting from a Unitary Educational System to a Dual Educational System upon Academic Achievement.
PUB DATE 92
NOTE 37p.
PUB TYPE Reports - Research/Technical (143) -- Historical Materials (060)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Academic Achievement; Access to Education; *Busing; Court Litigation; *Desegregation Plans; Elementary Secondary Education; Equal Education; Racial Discrimination; *Racial Integration; *School Desegregation
IDENTIFIERS *Norfolk City Schools VA

ABSTRACT

As a means of achieving a unitary school system, a mandated busing policy was implemented by the Norfolk, Virginia, public school system in 1986. This study examined the extent to which individual characteristics, school characteristics, and busing affected the student achievement gap between the busing and postbusing years. Methodology involved multiple regression analysis of: (1) the dependent variable, the achievement test scores of 431 fourth-grade students (228 African-Americans and 203 whites) for the busing year 1985-86 and the nonbusing year 1986-87; and (2) the independent variables, individual and school characteristics. Findings indicate that positive relationships existed between the gap in achievement test scores and Chapter 1, race, school income level, and the average number of library books. Negative relationships existed between the achievement gap and gender, school building age, and average teacher salary. The paper begins with an overview of educational desegregation litigation in the United States and the background of Norfolk's efforts to create a desegregated unitary school system. Two tables are included. (21 references) (LMI)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

V. W. Ikpa

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED346588

THE NORFOLK DECISION:

The Effects of Converting From A Unitary Educational System To A Dual Educational System Upon Academic Achievement

Vivian W. Ikpa

The problems associated with developing and implement ing policies which protect the rights of a minority group are frequently without optimal solutions. Such has been the case with policies that seek to eliminate legal segregation in American social institutions. Perhaps the most contro versial policies are those that mandate the desegregation of public educational institutions. Social and political forces continue to impact the nature of such efforts. Numerous individuals and interest groups continue to seek the assistance of the courts in providing legal resolutions to controversial desegregation problems.

The conservatism surrounding the Reagan/Bush Administrations has almost completely enveloped the wider society. The United States Justice Department has done little to encourage state compliance with desegregation policies. Affirmative action programs and other programs designed to assist minority group members in gaining equal access to educational opportunities continue to be challenged in the courts. Many of these challenges are sanctioned by the present presidential administration.

EA 024 015

 BEST COPY AVAILABLE

The policy of mandated busing for integration has been successfully challenged by public school systems. The United States Justice Department has supported the elimination of the policy, allowing public schools to resegregate. The struggle to eliminate the duality that existed and continues to exist in social institutions began more than a century ago. In 1992, the struggle continues.

The promises of the 1954 Brown Decision have not been fulfilled. After thirty-eight years, the promise of equal access to educational opportunities in desegregated settings has not become a reality for African-American children. The rationale for this desegregation policy resulted from the 1954 Brown v. The Topeka, Kansas Board of Education Supreme Court Case. In this landmark Decision, the United States Supreme Court unanimously ruled that African-American children should receive the same quality of education as white children.

The Impact of Brown

During the twenty years prior to the Brown Decision, the United States Supreme Court ruled in several decisions that the doctrine of "separate but equal" violated the equal protection clause of the 14th amendment (Leflar and Davis, 1954). These cases had a direct influence upon the 1954 Brown Decision. In Gaines, v. Canada 1938, and in Sipuel v. Board of Regents, 1948, the United States Supreme Court

invalidated school segregation because the facilities provided for African-Americans were found to be unequal to those provided for whites. In 1950, the Supreme Court stipulated that the physical structures and other facets of a school program were not the only considerations in determining educational opportunity. However, the entire educational experience needed to be considered (Report of the U.S. Commission on Civil Rights, March, 1975).

Another relevant decision was Sweatt v. Painter, 1950 in which the United States Supreme Court ruled that the state of Texas could not provide African-American students with equal educational opportunities in a separate law school. The fact that the facilities at the University of the Texas Law School were superior to those at the African-American law school was not the deciding factor in the decision. However, the decisive factor was the fact that the University of Texas "possesses to a far greater degree those qualities which are incapable of objective measurement but which make for greatness in a law school, (339 U. S. 629, 1950).

In the 1950 Mclaurin v. Oklahoma State Regents For Higher Education, the United States Supreme Court ruled that a African-American student should be treated like all other students and not segregated within the institution.

The judges declared that engaging in discussions and exchanging views with other students are "intangible considerations, indispensable to equal educational opportunities" (U. S. Commission On Civil Rights, 1975).

These cases led to the 1954 Brown Decision which held that school segregation, which had been invalidated in Sweatt and McLaurin because of the harm demonstrated in these cases, was universally harmful to African-American children.

The Brown Decision was a consolidation ruling which included four States: Kansas, Virginia, Delaware, and South Carolina. The issue of legally compelled segregation of students by race was the focus of this Decision. At issue in these cases was whether the states had the constitutional power to segregate African-American and white students in separate elementary and secondary public schools. These cases were sponsored by the NAACP legal committee and argued before the court by the NAACP lawyers. These lawyers, acting on the behalf of African-American parents and African-American children, contended that segregation is discrimination and, accordingly, a violation of the equal protection clause of the 14th Amendment of the Constitution of the United States.

The lower courts rulings in these four cases were based on the doctrine of "separate but equal "under which segregation was sustained as long as facilities for African-Americans and whites were equal. The doctrine of "separate but equal" was rendered in 1896 by the U.S. Supreme Court in the case of Plessy v. Ferguson. This ruling was later denounced as a mistake by the United States Department of Justice.

In 1954, the United States Supreme Court found that Topeka, Kansas operated a dual school system with separate facilities for African-Americans and whites. The court ruled: "We conclude that in the field of public education the doctrine of separate but equal has no place. Separate educational facilities are inherently unequal" (U. S. Commission on Civil Rights, 1975). Chief Justice Earl Warren delivered the unanimous decision of the court which quoted the passages from Sweatt and McLaurin which emphasized the intangible considerations affecting equal educational opportunity.

The Brown Decision resulted in the court ruling that legally compelled segregation of students by race is a deprivation of the equal protection of the law as guaranteed by the 14th amendment. Although the ruling in Brown was

directed against legally sanctioned segregation, the language in the Brown Decision supported a broader interpretation. The court recognized the inherent inequality of all segregation, noting only that the sanction of the law gives it greater effect.

This ruling reflected a concern for segregation resulting from factors other than legal compulsion. De jure segregation refers to deliberate, official separation of students on the basis of race, as in the school districts covered by the Brown Decision as well as other school systems operating under state law requiring separation. De facto segregation refers to racial separation that arises without official sanction or acquiescence. Illegal segregation may be caused by actions of school officials-for example through gerrymandering or attendance boundaries-- although such segregation is not officially recognized.

The May 17, 1954 Brown Decision declared that segregation in public education was unconstitutional. This ruling was followed by the May 31, 1955 Brown II Decision which stated that all provisions of federal, state or local law requiring or permitting segregation in public education must yield to the principle announced in the 1954 decision. The 1955 Brown II Decision provided the avenue through which

the public schools could begin to desegregate their systems voluntarily. One year after the 1954 Brown Decision, strategies for the elimination of segregation were argued before the Supreme Court. The court established a standard for the implementation of desegregation. This 1955 Brown II Decision required a "good faith" start in the transformation from a dual to a unitary education system, under the jurisdiction of district courts, "with all deliberate speed." (U. S. Commission On Civil Rights, 1975). The court also permitted limited delays in achieving complete desegregation if a school board could "establish that such time is necessary in the public interest (350, U.S. 413, 1956). In the area of higher education, the court ruled in Hawkins v. Board of Control of Florida that "all deliberate speed was applicable only to elementary and high schools. The immediate right to equal education remained in tact at all levels of education beyond secondary school (U. S. Commission On Civil Rights, 1975).

On April 20, 1971, Chief Justice Burger wrote a decision in which all members of the Supreme Court agreed. This case dealt with various and different "busing" problems. In Swann v. Charlotte-Mecklenburg Board of Education, the Supreme Court sustained a national desegregation plan re-

quiring extensive busing. The court ruled that cities whose schools have historically been segregated by law cannot defend continuing school desegregation after they have adopted a neighborhood school plan. The schools must be actually integrated no matter how much inconvenience and extra transportation are involved.

THE CITY OF NORFOLK: DUAL SCHOOLS

The state of Virginia led the southern region in its search for legal means of avoiding the impact of the Supreme Court's 1954 Brown Decision. The state of Virginia devised a program described as a program of massive resistance. Its philosophy reflected the belief that successive defense against desegregation was possible. As soon as one plan of avoidance was shattered, another plan was devised and implemented (Campbell, 1960). Massive resistance resulted from a sincere conviction that racial segregation was desirable and worth a struggle to retain if at all possible. The resistance shared a common resolve that the 1954 Brown Decision was in violation of the United States Constitution and therefore void (Ely, 1976).

During the summer of 1956, the Virginia General Assembly enacted into law a systemic program of segregation legisla-

tion. This law became effective on September 29, 1956. The major provisions were:

Chapter 71 no public elementary or secondary schools in in which white and colored children are mixed and taught shall receive any funds from the state's treasury for their operation. This chapter stated that funds are provided only for efficient elementary and secondary schools. An efficient school was defined as in which there is no racial integration of students.

Chapter 56 funds withheld from local school authorities by the the operation of chapter 71...shall be available to such county, city or town for the continuation of the public education of children of such county, city or town in nonsectarian private schools and for payment of salaries and wages of school personnel.

Chapter 62 authorized local school boards to transfer and spend school funds in the form of grants to students attending private, nonsectarian schools.

Chapter 70 all power of enrollment or placement of students in, and determination of sets of school attendance districts for public schools in Virginia in a Student Placement Board, thereby divesting local school boards and division superintendents... of all authority now or at any future time to determine the school to which any child should be admitted. Chapter 70 also established criteria to guide the board in its assignment of students.

Chapter 68 this was known as the public policy of the state of Virginia which required segregation in the public schools. This policy required the state of Virginia to assume direct responsibility for control of any school...to which children of both races are assigned and enrolled by any school authority acting voluntarily or under compulsion of any court order, and that such schools are closed and removed from the public system, with full control over it assumed by the governor (Campbell, 1960).

The era of massive resistance came to an end on January 11, 1957 when Judge Walter Hoffman, presiding over the United States District Court of the Eastern Division, found the Virginia Student Placement Act unconstitutional. Hoffman contended that "the courts cannot be blind to the obvious and the mere fact that chapter 70 makes no mention of white or colored school children is immaterial when we consider the clear intent of the legislative body" (Campbell, 1960).

On August 18, 1958, the Norfolk School Board met to consider the applications of 151 African-American junior and senior high students for admission to the public schools within the city. Prior to this time, no African-American children attended schools with white children. At the August 18, 1959 board meeting, the Norfolk School Board rejected the applications of the African-American students (Muse, 1961). The school board cited the possibility of racial confrontations as the primary rationale for rejecting the applicants.

United States District Judge Walter E. Hoffman denied the validity of the school board`s decision. As a result of increased pressure from the Federal District Court, the Norfolk School Board admitted 17 African-American students to six white junior and senior high schools (Campbell,

1960). The judge's actions presented a conflict between federal and state law in the state of Virginia. The laws of the state required the governor of the state to seize control and close any public schools which were required to admit African-Americans. On September 28, 1958, Governor Almond closed Norfolk`s six white high schools which had an aggregate enrollment of 10,000 students. These schools were closed in pursuance of an act of the Virginia legislature. As Muse (1961) noted:

In Norfolk, Virginia three thousand children were deprived of any schooling at all and over four thousand were attending loosely organized tutoring classes (pp. 158-162). On January 19, 1959 the three judge federal district court of declared the Norfolk school closing order in violation of the fourteenth amendment to the Constitution of the United States and therefore void (Muse, p. 182).

The United States Supreme Court's Decision on May 17, 1954 declared that the practice of segregating students in public school systems was unconstitutional. The Norfolk Desegregation case began in the days of the civil rights movement. In 1956, African-American parents in the city of Norfolk sued to integrate the schools. However, the city resisted and the litigation continued until 1971.

A UNITARY SCHOOL SYSTEM EVOLVES

In 1971, a federal judge approved a desegregation plan that required cross-town busing between paired schools. Almost 50% of the students were transported to new schools. Busing eliminated the all-African-American schools; however, the percentage of African-American students in some of the schools was between 65% and 70%.

As a result of this Decision, the Norfolk Public School System was required to desegregate. The court placed the primary responsibility for eliminating segregated schools on the local boards of education. The public schools in Norfolk, Virginia did not desegregate until January, 1970. The school system utilized clustering and pairing techniques as methods of desegregation. Busing was instituted to facilitate the integration of the Norfolk Public School System. Under the leadership of Superintendent Dr. Albert Ayars, the mandate issued in the United States Supreme Court case of Green v. County School Board was achieved. In this decision, the court ordered the school system to "take whatever steps might be necessary to convert to a unitary system .

In 1971, the Norfolk Public Schools System adopted and implemented a student assignment plan similar to that approved by the Supreme Court in the Swann case, which established guidelines for dual school systems converting to unitary status. Under the Norfolk Plan, students were assigned so that each school reflected the racial composition of the total system. Following is a summary of Norfolk's desegregation plan:

A. The desegregation plan was ordered by the Federal District into partial effect in 1970 and into full effect in 1971.

B. In general, the court ordered the following:

1. Full faculty desegregation. with each school reflecting approximately the existing race distribution at each level (elementary, junior and senior high).

2. Free Transportation. Prior to 1971, school transportation was furnished by private municipal transit organizations which were not under the direction of the school board. The company charged a fare for its service which was paid directly by the student. The court found that this practice constituted an unfair burden upon the plaintiffs and specified that the school board must provide free transportation as a part of its desegregation plan. In the language accompanying this order, the court made it clear that it would not approve any plan which placed an unfair share of the burden of desegregation on black children.

3. Student Assignment. The court ordered the school board to prepare a student assignment plan to disestablish the racial identity of each school and to present that plan to the court for approval.

4. Majority-Minority Transfer. The court required that the school board make provisions for students to transfer from schools were their race was in the minority.

C. Student Assignment

Elementary schools were arranged in pairs, triplets, and single attendance areas, with no schools assigned fewer than 40% of one race. Transportation was required for about one half of all students and was equally distributed between white and black neighborhoods.

D. Regulations

The Federal Court required the school board to produce a school organization and student assignment plan which would eliminate the racial identity in each school. The court permitted the school board to devise the plan and to develop implementation policies. Generally, the rules governing the school division's desegregation plan remained constant from 1970 through 1985. These plans were:

1. School attendance boundaries will not be drawn in such a manner as to assign students to racially identifiable schools. Racial identifiability was defined as fewer than 30 or more than 70% minority or non-minority students.

2. Attendance patterns were arranged in such a manner as to assign students to schools near their neighborhoods for part of the elementary grades. Single attendance zones were created wherever practical.

In February 1975, the United States District Court of Virginia acknowledged Norfolk's achievement and declared it

to be a unitary school system:

> It appears to the court that all issues in this action have been disposed of, that the School Board of the City of Norfolk has satisfied its affirmative duty to desegregate, that racial discrimination through official action has been eliminated from the system and that the Norfolk School System is now unitary.

During the 1981-82 school year, the Norfolk School Board met to consider a reduction in busing for integration. A series of meetings were held with citizens throughout the city to discuss proposed plans. One specific issue resulting from these meetings concerned the future of African-American children in one race schools. Many parents contended that African-American children would suffer educationally in African-American schools. The school board members sought to alleviate such fears by proposing: an expansion of pre-kindergarten programs to include four year olds from lower income homes; a program to increase parental involvement in schools attended primarily by African-American children; and a school effectiveness program to ensure that poor children would learn at the same rate as the more affluent students (Virginian Pilot, May 30, 1982).

The proposal to eliminate mandated busing was not without opposition. The Representative Council of the

Education Association of Norfolk issued the following statement:

> The Education Association of Norfolk opposes any effort to reduce busing that would cause any schools to resegregate. The school board is urged to strongly consider routes that will reduce travel time but maintain racial balance with a minimum amount of disruption in terms of students and/or teacher reassignments.
>
> Additionally, we reaffirm our opposition to the magnet school concept that would create an educational climate which is segregated in terms of intellectual, social, cultural, and/or economic status and thus is artificial in terms of preparation for life (Education Association of Norfolk, May 18, 1983).

After the series of public hearings were completed, the school board chairman addressed the following issues and concerns with members of the board and the public:

Busing's Drawbacks

> The practical drawbacks of mandatory busing have been amply discussed as a result of hearings held by the school board in May of 1982. They include: loss of parental involvement and support; absorption of scarce resources that might otherwise be available for direct educational needs; loss of large segments of community support; elimination of opportunities for educational advancement outside of normal school hours such as extra-curricular activities, administration of discipline and remedial tutoring; disruption of communication between the home and school...loss of middle class students; white and black, to private schools and/or surrounding communities with a consequent decline in desegregation; and last but not least, the imposition of busing on some children but

not others because of the demographic makeup of Norfolk neighborhoods. In the face of such drawbacks, in a school system such as Norfolk's, which is legally desegregated, a policy of massive crosstown busing at the elementary level should be supported only if the benefits to be gained are clear and compelling.

The Rationale For Busing

Three principal arguments in support of busing emerged from the public hearings held in May. (1) Busing is needed to guarantee equal school resources. (2) Busing is needed to improve black academic achievement. (3) Busing is desirable because it achieves desegregated schools.

Busing As A Guarantee Of Equal School Resources

If mandatory busing were the only way to guarantee equal resource allocation for blacks, then it would be unavoidable. I do not believe that it is necessary to guarantee equality of resources. The guarantee that I propose is that the school system report annually to the United States Magistrate for the United States District Court for the Eastern District of Virginia. Such an annual report would detail the allocation of human and material resources devoted to the various elementary schools in the city of Norfolk.

Busing and Educational Achievement

Another compelling justification for a continuation of massive cross-town busing might be present if busing held a clear promise of educational gain for black children without detriment to others, provided that the policy itself did not result in a resegregated system and the loss of such benefit. If, as I believe the evidence shows, the policy itself is leading to a resegregated system, any benefit is not only speculative but transitory.

Busing As A Means To The End Of Desegregation

The principal potential justification for continuation of elementary school busing would be if it held reasonable prospects of assuring a stably desegregated system. We must not forget that the principle rationale behind the institution of such policy by the courts was to achieve desegregated school systems. Undoubtedly the courts felt that such desegregated systems in themselves were good. It now appears, however that the policy is counter-productive to a stably desegregated school system.

The choice before us is not a metropolitan plan but a plan for massive cross-town busing in Norfolk while adjacent residential communities rely on buses to serve only neighborhood elementary schools. If the decision before us concerned a plan that covered the entire metropolitan area making up one community, the considerations at this point might be different. We must deal with the situation as it is and not as one might wish it to be.

Many proponents of busing maintain that the school system has no right to take into account the reaction of white parents to busing and the refusal of such parents to submit their children to mandatory busing. Such proponents maintain that such white reaction is one of racism that it is not busing to which such whites object but to going to school with blacks, per se. While there may be such sentiment in a few, I do not feel that that is the motivation of the vast majority of whites.

The effect of the institution of busing in Norfolk is history. The more relevant question is what effect will continued busing have on the resegregation of the Norfolk School System and what effect will the adoption of the neighborhood schools have on stemming the out-flow of the middle class African-American and white from the schools.

Dilemma

> In the face of such projections, the dilemma before us is clearly posed. If we do nothing, in all probability, the Norfolk School System will resegregate to the point where all or nearly all of our schools will be racially identifiable. The middle class will have fled the school system and the children, black and white, who are left will be from the poorest, most powerless, both economically and politically, segment of our society (Norfolk School Board Meeting, January 23, 1983).

Prior to the desegregation of Norfolk, Virginia public schools in 1970, 57% of the systems 56,830 students were white and 43% were African-American. However, after more than fifteen years of mandated busing for integration, enrollment dropped to 34,803 students. Of this number, 42% were whites and 58% were African-Americans. As a result of this loss of more than 18,000 white students, the Norfolk School Board suggested a new approach to desegregation. The school board voted to abolish cross-town busing for elementary school children. The revised desegregation plan assigned students to neighborhood schools; thereby creating ten elementary schools that are more than 95% African-American.

The neighborhood school plan was challenged in the United States District Court for Virginia. Although the court originally ordered the busing policy, it withdrew from the

case in 1975. In 1975, the court ruled that the Norfolk public schools system was unitary. However, the plaintiffs contended that the system had become more segregated since 1975. The court did not agree and issued the following statement:

> The Norfolk School Board is an integrated body, the school administration is racially balanced, the racial composition of faculty and staff is mixed, and the overwhelming majority of school children, of both races, at the elementary, junior, and senior high levels attend schools who`s bodies are racially mixed.
>
> In addition, there has been no contention that extra curricular activities, transportation network, and school facilities are operated in a racially dual fashion (Flygare, 1986, p. 679).

THE SCHOOLS RESEGREGATE

In 1986 the Norfolk School Board presented to The United States District Court for the Eastern District of Virginia a resolution for review and approval adopting a neighborhood school plan. The plan follows:

> WHEREAS, the School Board of the City of Norfolk has undertaken an extensive review of current practices of student assignments in order to determine if it is desirable and prudent to reduce the crosstown busing of younger children; and

WHEREAS, the Board has carefully studied proposals for assigning children to neighborhood schools and has received advice and assistance from several consultants with regard to assignment of elementary children; and

WHEREAS, the Board has conducted extensive public hearings throughout the City of Norfolk and has had the benefit of vigorous public debate on the issue of student assignment plans; and

WHEREAS, the School Board is of the opinion that the neighborhood school proposal is in the best interest of all Norfolk children and holds the greatest promise of affording those children a quality education in a unitary and truly desegregated school system; now, therefore

BE IT RESOLVED by the School Board of the City of Norfolk:

Section 1: That the neighborhood school plan attached hereto be, and the same hereby is, approved and adopted.

Section 2: That the Superintendent of Schools is hereby instructed to proceed with such plans, programs and logistical arrangements as will enable the school system to implement the approved neighborhood plan in the fall of 1983, subject, however, to the obtaining of judicial approval as contemplated by section 3 of this resolution.

Section 3: That the office of the City Attorney is hereby instructed to initiate appropriate proceedings in the United States District court for the Eastern District of Virginia to secure judicial approval of the plan hereby adopted.

THE PROBLEM

As a means of achieving unitary school systems, the mandated busing policy was implemented by the Norfolk Public Schools System. Mandated busing was intended to help African-American children acquire basic education skills, improve their rates of academic achievement, and ultimately, help them become self-sufficient. (Wilson, 1983).

The purpose of this study is to examine the extent to which individual characteristics, busing, and school characteristics effected the achievement gap between the busing and postbusing years.

The findings of this study will be utilized to test the hypothesis which holds:

four (noonbused) was not significantly effected by changes in individual chartacteristics, busing, and school characteristics.

METHOD AND PROCEDURE

The methodology to be utilized is descriptive research, which is concerned with hypothesis formulation and testing, the analysis of the relationships between nonmanipulative variables, and the development of generalizations. The

statistical data was gathered from the test results of fourth-grade students through the administration of The Science Research Associates Assessment Survey Series (SRA).

SOURCES OF DATA AND COLLECTION PROCEDURES

Relevant research data were obtained from The Norfolk Public Schools Department of Research, Testing, and Statistics. The name, sex, race, test results, and schools attended, for each student were obtained from the 1986 and 1987 Science Research Associates Assessment Survey Series. The 1986 test results represent the the achievement scores of the of the fourth grade students during the busing year. The 1987 achievement scores represent the achievement scores of of this same group of students during the nonbusing year.

RESEARCH DESIGN

The dependent variable in this study is the achievement test scores on the Science Research Associates Assessment Survey Series (SRA) of African-American and white fourth grade students from selected elementary schools within the Norfolk Public Schools System. The independent variables investigated were: school income level; school racial

composition, teacher and student; school expenditures, instructional, substitute, and teacher salaries; the number of library books; the age of the school building; student/teacher ratio; percentage of teachers with advanced degrees; and average class size. These specific variables represented the school characteristics . Other independent variables were gender, race and participation in the chapter 1 program. These variables represented individual student characteristics. Additionally, busing was utilized as an independent variable in this study.

The above variables were collected for the 1985-86 (busing) and the 1986-87 (non-busing) school years. The differences between these characteristics were computed utilizing the multiple regressions statistical tests. The specific statistical tests employed were T-Tests and Multiple Linear Regressions.

The methodology of this study involved grouping the city's 37 elementary schools into three categories: (1) 10 "target schools" comprising over 90% African-american enrollment; (2) mixed schools comprising 10-50% white enrollment; and (3) predominantly white schools comprising over 50% white

SAMPLE

The fourth-grade population in the city of Norfolk is 2,600; therefore, a sample of at least 335 is required. The sample size for this study is 431 students; 204 females and 227 males. Racially, the composition is 228 African-Americans and 203 whites.

ANALYSIS /DISCUSSION

These three sets of varialbles; individual characteristics, busing, and school characteristics were compared utilizing the SPSS PC+ subprogram Multiple Regression. This analysis was undertaken to determine if the variance in busing and postbusing achievement gap may be attributed to the interaction of individual characteristics, busing and school characteristics.

As indicated in Table 1, these selected variables had an adjusted R square of approximately .12. According, 12 percent of the variance in test scores may be attributed to the combined effects of individual characteristics, busing,

and school characteristics. The F value 4.78 suggested that this variance is statistically significant ($P < .05$). Findings (Table 2) indicated that the T value .0431 was statistically significant ($P < .05$) for chapter 1 participants. As participation in the chapter one program increased the achievement test scores of students increased; therefore, a positive relationship appeared to exist between chapter one participation and achievement test scores. As previously noted, the chapter one program provided students with individuaized instruction in the areas of math and/or reading. Data suggested that instructional sequences provided by teachers in the chapter one program may positively explain the variance in achievement test scores. One may contend that teacher characteristics may also be a variable in expalaining the varaiance in achievement scores for chapter one students. Chapter one teachers are generally specialists in mathematics and reading; therefore, the level of training may be more extensive for these individuals. Findings imply that students who receive individualized instruction from specialized teachers perform better on achievement tests.

Findings also indicated that as the number of females increased, the gap in achievement scorews tended to increase. The T value -2.291 was statistically significant ($P < .05$). Although the sex of a student was found to be a statistically insignificant variable in explaining variance in test scores when regressed with gender and chapter one, the results, in this section suggested that gender as an individual characteristic may effect the variance in the achievement gap between grades three and four when combined with busing and school characteristics. One may postulate that changes in school characteristics may have a negative effect upon the achievement test scores of females. Since riding a bus to school produces a change in school characteristics, female students may suffer more than their male counterparts as a result of these changes. However, no conclusive findings are evident. As Table 2 indicated, there is a negative relationship between the age of school buildings and the achievement gap. The T value, -2.14 was found to be statistically significant ($P < .05$) in explaining the variance in test scores. Analysis of data indicated that as the age of the schools attended by students increased, the achievement test scores of students

tended to decrease. One may contend that the age of a school is a significant school characteristic in explaining the variance in test scores when combined with individual characteristics and busing. The implication of these findings suggest that the achievement gap between the busing and nonbusing year may have been significantly effceted by specific individual characteristics of bused and nonbused students. Conclusive statements can not be generated from this analysis. Further investigations are needed.

Race as a variable effecting the achievemeent gap between the busing and nonbusing year also appeared to be statistically significant ($P < .05$) in explaining the variance in test scores of students. The T value 2.24 indicated that as the number of white students increased in a given school, the achievement gap decreased. Since ten of the public schools in Norfolk are located in comparably low income neighborhoods with student populations that are more than 90 percenty African-American, one may contend that race and school income are interelated. The T value for school income was 2.68 which was statistically significant in effecting the achievement gap ($P < .05$). As indicated, there was a positive relationship between school income and achievement test scores. Given this finding, one may

contend that students located in schools that are more than 90 percent African-American tend to perform significantly below other students on given achievement test as result of school income level and not on the basis of skin color. Data analysis also indicated that a positive relationship existed between the average number of library books and achievement test scores. The T value, 1.985 indicated statistical significance ($P < .05$). As the number of library books in schools increased, the achievement scores of students tended to increase. One may postulate that increased availiabilty of library books may serve to stimulate students' interests in reading; therefore, enhance performance on achievement test scores. One may also contend that the schools that offer more library books are more effective in developing and implementing instructional strategies that improve student performance on achievement tests.

The results shown in Table 2 suggested that a negative relationship existed between average teachers salary and achievement test scores. The T value -3.59 was statistically significant ($P < .05$). As previously noted, teachers salaries are related to years of experience.

Salary levels increase with years of employment; therefore, findings suggest that students tend to perform better on acvhievement tests when taught by younger teachers. This result implies that teachers with less teaching experience in the city of Norfolk tend to implement teaching starategies that are more effective in increasing the achievement test scores of students. Perhaps teacher effectiveness tends to decline after a given period of time. One must also consider the educational differences between younger , less experienced teachers, and those more experienced. Since salary levels and years of experience are related, the differences in how teachers are trained may be significant in explaining the relationship between average salary level and achievement test scores. A more extensive investigation of this variable must be performed before conclusive findings can be offered.

SUMMARY

Results indicated that individual characteristics, busing, and school characteristics were statistically significant in explaining the achievement gap between grades

three and four. Findings indicated that positive relationships existed between the gap in achievement test scores and chapter 1, race, school income level, and the average number of library books. Negative relationships appeared to exist between the achievement gap and gender, age of the school building and average teacher salary. Based upon these findings, the hypothesis was rejected.

REFERENCES

Brown v. Board of Education. 347 U.S. 483, May 17, 1954.

Campbell, E. Q. (1960). When A City Closes Its Schools. Chapel Hill: Institute For Research In Social Science, University of North Carolina.

Census Tracts (1980). Norfolk-Virginia Beach-Portsmouth, Virginia. Census of Population and Housing. Washington, D.C.: United States Department of Commerce, Bureau of the Census.

Ely, J. W. (1976). The Crisis of Conservative Virginia. Knoxville, Tennessee: The University of Tennessee Press.

Flygare, T. J. (May, 1986). A Return to Neighborhood Schools As a Way of Stemming White Flight. Newsweek. 679

Gates, R. L. (1964). Making of Massive Resistance; Virginia's Politics of School Desegregation, 1954-1956. Chapel Hill: University of North Carolina Press.

Miller, L. P. (1986). Brown Plus Thirty: Perspectives On Desegregation: Proceedings of a Conference Commemorating the Thirtieth Anniversary of the 1954 Supreme Court Decision In Brown v. Board of Education, Topeka Kansas, held on September 11-14, 1984. New York, New York: Metropolitan Center For Educational Research, Development and Training.

Muse, B. (1961). Virginia's Massive Resistance. Bloomington, Indiana: Indiana University Press.

Norfolk, Virginia Office of The Electoral Board (1988) Precinct Locations.

SRA Achievement Series Addendum for Fall 1978 Standardization, (1979). Science Research Associates, Inc., Chicago, Illinois. 3.

SRA Technical Report 3, (1981). Science Research Associates, Inc., Chicago, Illinois. 2.

SRA User's Guide, (1981). Science Research Associates, Inc., Chicago, Illinois. 11.

The Virginian Pilot (February, 7 1986) Norfolk Plan to End Busing Ok'd, Norfolk, Virginia.

The Virginian pilot (March 19, 1986) After Busing Ends. Norfolk, Virginia.

The Virginian Pilot (April 15, 1986) School Busing Vote Draws Harsh reactions. Norfolk, Virginia.

The Virginian Pilot (June 25, 1985) Norfolk School Board Presses Court Ordered Busing Suit. Norfolk, Virginia.

The Virginian Pilot (April 14, 1986) Pro Busing Group Plans Boycott. Norfolk, Virginia.

The Virginian Pilot (February 23, 1986) A Top Justice Official Speaks Out on Ruling in Norfolk Busing Case. Norfolk, Virginia.

The Virginian Pilot (April 2, 1982) Plan to Curb School Busing Criticized. Norfolk, Virginia.

The Virginian Pilot (March 23, 1983) Busing and Education. Norfolk, Virginia.

Wilson, L. (1983) A Review of Busing In Norfolk, Virginia, Unpublished Report, Norfolk School Board.

TABLE 1

Achievement Gap Between Grades Three and Four

Individual Characteristics, Busing
And School Characteristics

Multiple R	.38395
R Square	.14742
Adujusted R	.11660
Standard Error	16.32458

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	15	19122.60620	1274.84041
Residual	415	110594.11306	266.49184

F = 4.78379 F= .0000

TABLE 2

Achievement Gap Between Grades Three and Four

Individual Characteristics, Busing
And School Characteristics

Variables	Beta	T	significance of T
CHP	.09958	2.029	.0431
GEN	-.10690	-2.291	.0224
TEA	.03645	.495	.6208
AGE	-.10439	-2.144	.0326
DGR	-.02381	-.290	.7719
BUS	.05606	1.022	.3075
RAC	.12174	2.241	.0256
EXP	.12367	1.910	.0568
INC	.16966	2.685	.0075
SUB	-	.035	.9720
RTO	-	-.074	.9409
BKS	.13112	1.985	.0478
SAL	-.27987	-3.590	.0004
CSZ	-.02634	-.308	.7582
STD	-.16113	-1.415	.1579
(Constant)		2.267	.0239